

16. (Amended) The method according to claim 12, wherein said nucleic acid amplification is carried out by a polymerase chain reaction.

17. (Amended) The method according to claim 12, wherein the detection is carried out by distinguishing the to-be-detected bacteria from not-to-be-detected bacteria on the basis of differences in the genomic DNA or RNA in at least one nucleotide position in the region of a nucleic acid sequence according to claim 30.

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19. (Amended) An isolated nucleic acid molecule according to claim 6, wherein the nucleic acid sequence is from 15 to 30, nucleotides long.

20. (Amended) An isolated nucleic acid molecule according to claim 8, wherein the nucleic acid molecule is present

(i) as DNA or  
(ii) as RNA corresponding to (i) or  
(iii) as PNA.

22. (Amended) An isolated nucleic acid molecule according to claim 30, wherein the nucleic acid sequence has been modified in such a manner that up to 20 % of the nucleotides of at least 10 contiguous nucleotides of its nucleotide chain have been replaced by nucleotides that do not occur naturally in bacteria.

23. (Amended) An isolated nucleic acid molecule according to claim 10, wherein the nucleic acid sequence has been modified or labelled or additionally modified or labelled in such a manner that it comprises, in a manner known *per se* for analytical detection processes, one or more radioactive groups, coloured groups, fluorescent groups, groups for immobilisation on a solid phase or groups for an indirect or direct enzymatic reaction.

24. (Amended) An isolated nucleic acid molecule according to claim 10, wherein the nucleic acid sequence has been modified or labelled or additionally modified or labelled in such a manner that it comprises, in a manner known *per se* for analytical detection processes, one or

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~~more groups for an indirect or direct reaction using antibodies, antigens, enzymes or substances having an affinity for enzymes or enzyme complexes.~~

Kindly add new claims 26-44 as follows:

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--26. (New) A kit comprising: (i) one or more nucleic acid molecules selected from the group consisting of: (a) an isolated nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shortened sequence as compared to that of SEQ ID No. 1.; (b) SEQ ID No. 1; (c) SEQ ID No. 2 and (ii) optionally substances for analytical detection processes.

27. (New) A kit comprising: (i) one or more nucleic acid molecules selected from the group consisting of: (a) an isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shorter sequence than that of SEQ ID No. 1; (b) SEQ ID No. 1; (c) SEQ ID No. 2 and (ii) optionally substances for analytical detection processes.

28. (New) A kit comprising: (i) one or more nucleic acid molecules selected from the group consisting of: (a) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shorter sequence than that of SEQ ID No. 1 and said 10 contiguous nucleotides correspond to said nucleic acid molecule in 9 out of 10 contiguous nucleotides; (b) SEQ ID No. 1; (c) SEQ ID No. 2 and (ii) optionally substances for analytical detection processes.

29. (New) A kit comprising: (i) one or more nucleic acid molecules selected from the group consisting of: (a) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ

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ID No. 5, wherein said nucleic acid molecule comprises a shorter sequence than that of SEQ ID No. 1 and said 10 contiguous nucleotides correspond to said nucleic acid molecule in 8 out of 10 contiguous nucleotides; (b) SEQ ID No. 1; (c) SEQ ID No. 2 and (ii) optionally substances for analytical detection processes.

30. (New) An isolated nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shortened sequence as compared to that of SEQ ID No. 1.

31. (New) The isolated nucleic acid molecule according to claim 30, wherein the nucleic acid sequence contains 10 to 250 nucleotides.

32. (New) The isolated nucleic acid molecule according to claim 30, wherein the nucleic acid sequence contains 15 to 30, nucleotides.

33. (New) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shorter sequence then that of SEQ ID No. 1.

34. (New) The isolated nucleic acid molecule according to claim 33, wherein the nucleic acid sequence contains 10 to 250 nucleotides.

35. (New) The isolated nucleic acid molecule according to claim 33, wherein the nucleic acid sequence contains 15 to 30, nucleotides.

36. (New) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shorter sequence than that of SEQ ID No. 1 and said 10

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contiguous nucleotides correspond to said nucleic acid molecule in 9 out of 10 contiguous nucleotides.

37. (New) The isolated nucleic acid molecule according to claim 36, wherein the nucleic acid sequence contains 10 to 250 nucleotides.

38. (New) The isolated nucleic acid molecule according to claim 36, wherein the nucleic acid sequence contains 15 to 30 nucleotides.

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39. (New) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shorter sequence than that of SEQ ID No. 1 and said 10 contiguous nucleotides correspond to said nucleic acid molecule in 8 out of 10 contiguous nucleotides.

40. (New) The isolated nucleic acid molecule according to claim 39, wherein the nucleic acid sequence contains 10 to 250 nucleotides.

41. (New) The isolated nucleic acid molecule according to claim 39, wherein the nucleic acid sequence contains 15 to 30 nucleotides.

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42. (New) An isolated nucleic acid molecule comprising at least 10 contiguous nucleotides from a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5, wherein said nucleic acid molecule comprises a shorter sequence than that of SEQ ID No. 1 and said 10 contiguous nucleotides are at least 90% homologous to a nucleic acid sequence selected from the group consisting of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and the complement of SEQ ID No. 3, SEQ ID No. 4 and SEQ ID No. 5 and said nucleic acid sequences "allows the detection of bacteria of the *Pseudomonas* genus by means of nucleic acid hybridisation or amplification.

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43. (New) The isolated nucleic acid molecule according to claim 42, wherein the nucleic acid sequence contains 10 to 250 nucleotides.

44. (New) The isolated nucleic acid molecule according to claim 42, wherein the nucleic acid sequence contains 15 to 30, nucleotides - -